



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

September 27, 2013

Via E-mail

Mr. Brian K. Hutchison
Chief Executive Officer
RTI Surgical, Inc.
11621 Research Circle
Alachua, Florida 32615

Re: RTI Surgical, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2012
Filed February 26, 2013
Form 8-K Dated August 6, 2013
Filed August 6, 2013
File No.: 000-31271

Dear Mr. Hutchison:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filings, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filings and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2012

-Index to Consolidated Financial Statements, page 42

-Notes to Consolidated Financial Statements, page 48

Note 2. Summary of Significant Accounting Policies, page 48

-Cash and Cash Equivalents, page 49

1. We note that your cash and cash equivalents have original maturities of three months or less. Please tell us whether your cash equivalents are also highly liquid investments and meet the definition of cash equivalents in FASB ASC 305-10-20.

2. Further to the above, we note that cash and cash equivalents include overnight repurchase agreements. Please provide us with an explanation of the significant terms of the overnight repurchase agreements. Please also quantify the impact of these agreements on your balance sheet at each reporting date. Within your discussion, please clarify if these agreements are reverse repurchase agreements or repurchase agreements. Finally, discuss how you account for these overnight repurchase agreements, citing relevant authoritative literature.

-Revenue Recognition, page 51

3. We note your disclosures regarding your agreements with Zimmer and Davol. We also note that sales to Medtronic represented 18% of your sales in 2012 and that you have certain distribution agreements with Medtronic. Please tell us how you account for these distribution agreements, including any upfront or periodic payments made under the agreements.

Note 12. Income Taxes, page 59

4. We note from page 60 that you consider undistributed earnings of your German subsidiary to be indefinitely reinvested and that it is not practicable to estimate the amount of tax that might be payable on these undistributed earnings. Please tell us and revise future filings to disclose the amount of undistributed earnings related to your foreign subsidiaries that you have earned as of December 31, 2012 that you consider to be indefinitely reinvested. Refer to the guidance in FASB ASC paragraph 740-30.
5. We note that your December 31, 2012 balance sheet presents cash and cash equivalents of approximately \$50 million. Please revise your liquidity discussion in Management's Discussion and Analysis in future filings, to the extent that you believe material, to disclose the amount of cash and cash equivalents as well as liquid investments held by any other foreign subsidiaries at December 31, 2012 and quantify the amount that would not be available for use in the United States without incurring U.S taxes. Please further provide a discussion of any known trends, demands or uncertainties as a result of your policies of permanently reinvesting earnings outside the United States that are reasonably likely to have a material effect on the business as a whole or that may be relevant to your financial flexibility. Refer to Item 303(a)(1) of Regulation S-K.

Form 8-K Filed on August 6, 2013

6. We note that you present forward looking non-GAAP financial measures such as net income excluding certain items for fiscal 2013 and the third quarter of 2013. Item 100(a)(2) of Regulation G requires a quantitative reconciliation (to the extent available without unreasonable efforts) of the non-GAAP forward looking measure to the most directly comparable GAAP measure. Giving consideration to the fact that this Form 8-K

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is incorporated by reference into your Form S-3 filed on September 17, 2013, please amend the Form 8-K to include, to the extent available without unreasonable efforts, the reconciliations required by Item 100(a)(2) of Regulation G.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or Lynn Dicker, Reviewing Accountant, at (202) 551-3616 if you have questions regarding these comments. In this regard, do not hesitate to contact me at (202) 551-3643.

Sincerely,

/s/ Lynn Dicker for

Kevin L. Vaughn
Accounting Branch Chief